

REMARKS

Claims 1-14 and 21-27 are pending and claims 1-14 and 21-27 stand rejected. No new matter is introduced by the present Amendment.

The Examiner indicated that the finality of the previous Office Action has been withdrawn pursuant to 37 CFR 1.114 and Applicants' submission filed on March 16, 2006, has been entered.

Claiming Benefit Of Earlier Filed Provisional Application Under 119(e)

The Examiner asserted that the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-14 and 21-27 of this application. However, it is well established that priority claims under sections 119 and 120 are evaluated on a claim by claim basis. The evaluation of the particular priority date of a claim need only be considered under circumstances in which there is an intervening reference with a critical date between the actual filing date and the date of a priority claim. This issue is moot until such a reference becomes of record. See, for example, the discussion in the context of a foreign priority claim under section 119 in MPEP 201.15. Therefore, Applicants do not presently consider this issue further.

Informalities

The Examiner objected to the specification, at amended paragraph beginning at page 21, line 12, asserting that "it is not clear how a methylene group, which is divalent, can be replaced with groups that are not divalent." In the previous response, Applicants submitted, and continue to maintain, that one of ordinary skill in the art would recognize that the substituted group would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds to each group. In response, the Examiner asserted that "Applicants' assertion is merely attorney argument that is not supported by any objective evidence on the present record. The instant specification merely discloses that one of the methylene groups in the group  $-(CH_2)_nH$  can be replaced by N, C, B, Si, P or a 'CR<sub>b</sub>'." However, Applicants note that the specification expressly teaches that "**one or more** of the methylene groups is optionally replaced by O, S, N, C, B, Si, P, C=O, O=S=O...." (Emphasis added). See specification at, for example, page 3, lines 5-15.

Since the specification clearly indicates that one or more methylene groups can be replaced, one of ordinary skill in the art would recognize that the substituted groups would be inserted into the methylene chain so as to provide the appropriate number of bonds to each group. Applicants provide pages from Chemistry & Chemical Reactivity by John C. Kotz & Paul Treichel Jr. (Saunders College Publishers, New York, 1996; pp 404-405; pp 410-411), which provide the basic rules for drawing molecular structures. It is noted that, when necessary, an atom pair can be converted to another bond. Hence, one skilled in the chemical arts would know to provide the appropriate number of bonds. Applicants respectfully request the reconsideration and withdrawal of the objections to the specification.

Thus, since one of ordinary skill in the art would be able to understand how a divalent methylene group could be substituted with an appropriate combination of disclosed atoms and groups, the specification is clear and Applicants respectfully request the withdrawal of the objection to the specification.

The Examiner also objected to the specification asserting that when the R group of, for example, an  $\text{NR}_a$  group is a bond, "it is not clear to what the R groups in the groups are bonded." Applicants submit that generally the term "a bond" is clear, and that one of ordinary skill in the art would recognize that when an R group is a bond, the bond is between adjacent groups in the methylene chain. However, in order to advance prosecution, Applicants have removed the bond language from the description of the R groups in the specification. As such, the Examiner's objection to the specification is presently moot.

The Examiner objected to the amended specification at pages 3, 8 and 20, noting that "specification also discloses that the solubilizing substituent comprises a  $-(\text{CH}_2)_n\text{H}$  group where n is an integer between 1 and 50 and one or more of the methylene groups can be replaced by B or P....However, it is not clear how a methylene group, which is divalent, can be replaced with groups that are not divalent." Applicants continue to maintain that one of ordinary skill in the art would recognize that the substituted B or P would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds. No objective evidence is needed on this point, since clearly one of ordinary skill in the organic synthesis art would recognize that a substituted B or P would have to be inserted in a way to provide the appropriate number of

bonds. Additionally, Applicants note that “[t]he specification need not disclose what is well known to those skilled in the art...” See MPEP § 2164.05(a).

However, Applicants provide pages from Chemistry & Chemical Reactivity by John C. Kotz & Paul Treichel Jr. (Saunders College Publishers, New York, 1996; pp 404-405; pp 410-411), which provide the basic rules for drawing molecular structures. It is noted that, when necessary, an atom pair can be converted to another bond. Hence, one skilled in the chemical arts would know to provide the appropriate number of bonds. Applicants respectfully request the reconsideration and withdrawal of the objections to the specification.

The Examiner noted that the term “Tedlar” is used as a trademark in the specification and was not capitalized. Further, the Examiner indicated that the example of “Tedlar” was not exhaustive and the entire specification should be reviewed for compliance to the proper use of trademarks. Applicants have amended the specification, as noted above, to provide the proper use of trademarked terms. Applicants respectfully request the reconsideration and removal of the objection due to improper use of trademarked terms.

#### Rejection Under 35 U.S.C. §112, second paragraph

The Examiner rejected claims 1-14 and 21-27 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the Examiner rejected the claims 1, 8, and 21 as being indefinite in the phrase “the solubilizing substituent comprises a  $-(CH_2)_nH$  group where  $n$  is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by a ...B, P...”, asserting that “it is not clear how a methylene group, which is divalent, can be replaced with groups that are not divalent.”

As discussed above, Applicants continue to maintain that one of ordinary skill in the art would recognize that the substituted B or P would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds. More specifically, Applicants note that the specification expressly teaches that “one or more of the methylene groups is optionally replaced by “...O, S, B, P, C=O, O=S=O.....” See specification at, for example, page 3, lines 5-15. Since the specification clearly indicates that one or more methylene groups can be replaced, one of

ordinary skill in the art would recognize that the substitutions would be inserted into the methylene chain so as to provide the appropriate number of bonds.

Specifically, Applicants continue to maintain that one of ordinary skill in the art would recognize that the substituted B or P would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds. Furthermore, no objective evidence is needed on this point, since clearly one of ordinary skill in the chemical arts would recognize that a substituted B or P would have to be inserted in a way to provide the appropriate number of bonds.

Nevertheless, Applicants provide pages from Chemistry & Chemical Reactivity by John C. Kotz & Paul Treichel Jr. (Saunders College Publishers, New York, 1996; pp 404-405; pp 410-411), which provide the basic rules for drawing molecular structures. It is noted that, when necessary, an atom pair can be converted to another bond. Hence, it would be obvious to one skilled in the chemical arts to provide the appropriate number of bonds. Applicants respectfully request the reconsideration and withdrawal of the rejection to claims 1, 8, and 21, and the claims depending from claims 1, 8, and 21. Since the claims 1-14 and 21-27 are definite, Applicants respectfully request the withdrawal of the rejection of claims 1-14 and 21-27 under 35 U.S.C. § 112, second paragraph, as being indefinite.

The Examiner rejected the claim 25 as being indefinite in the phrase “R<sub>7</sub> comprises a - (CH<sub>2</sub>)<sub>n</sub>H group where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by a ...B, P...”, asserting that “it is not clear how a methylene group, which is divalent, can be replaced with groups that are not divalent.” As discussed above, Applicants continue to maintain that one of ordinary skill in the art would recognize that the substituted B or P would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds. More specifically, Applicants note that the specification expressly teaches that “one or more of the methylene groups is optionally replaced by “...O, S, B, P, C=O, O=S=O.....” See specification at, for example, page 3, lines 5-15. Since the specification clearly indicates that one or more methylene groups can be replaced, one of ordinary skill in the art would recognize that the substitutions would be inserted into the methylene chain so as to provide the appropriate number of bonds.

Applicants continue to maintain that one of ordinary skill in the art would recognize that the substituted B or P would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds. Nevertheless, Applicants provide pages from Chemistry & Chemical Reactivity by John C. Kotz & Paul Treichel Jr. (Saunders College Publishers, New York, 1996; pp 404-405; pp 410-411), which provide the basic rules for drawing molecular structures. It is noted that, when necessary, an atom pair can be converted to another bond. Hence, it would be obvious to one skilled in the chemical arts to provide the appropriate number of bonds. Applicants respectfully request the reconsideration and withdrawal of the rejection to claim 25 and the claims depending from claim 25.

Rejections Under 35 U.S.C. §112, first paragraph

The Examiner rejected claims 1-14 and 21-27 under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Specifically, the Examiner asserts that the originally filed specification does not provide an adequate written description of the symbol X. The Examiner noted that instant claims 1, 8, 21, and 25 recite that in the charge transport compound formula, the symbol X is “a p-N,N-diphenylaminophenylene group.” However, the Examiner further asserts that the originally filed specification at page 22 exemplifies two particular charge transport compounds that are represented by the chemical formulas recited in instant claims 1, 8, 21, and 25, when the symbol X is p-N,N-diphenylaminophenylene. Further, the Examiner asserts that the term “a p-N,N-diphenylaminophenylene group” is broader than the disclosed p-N,N-diphenylaminophenylene because it encompasses substituted p-N,N-diphenylaminophenylene groups.

Applicants note that the amended specification at page 3, lines 1-15 and at page 20, line 23-page 21, line 6, for example, refer to X as comprising an arylamine group such as a p-(N,N-disubstituted)arylamine *group*. (emphasis provided) The notation where X is represented by a p-N,N-diphenylaminophenylene *group* is an example of such a p-(N,N-disubstituted)arylamine *group*. (emphasis provided) Further, Applicants note that the introductory text to the structures listed on page 22 is as follows: “Specific, non-limiting examples of suitable charge transport materials within the general structure of the present invention have the following structures.” Hence, the structures provided are **non-limiting examples**. Other structures, within the general

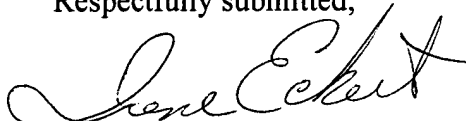
structure of the invention, are possible and claimed. Hence, the term p-N,N-diphenylaminophenylene group is not broader than what has been disclosed and described in the instant application. Therefore, Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 1, 8, 21, and 25 under 35 U.S.C. §112, first paragraph. Since the content of claims 1-14 and 21-27 is described in the instant application, Applicants respectfully request the withdrawal of the rejection of claims 1-14 and 21-27 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

CONCLUSION

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'Irene Eckert', written in black ink.

Irene Eckert  
Registration No. 52,848

Customer No. 24113  
Patterson, Thunte, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, Minnesota 55402-2100  
Telephone: (612) 252-1541